

GP-303461

## DOD CONTROL METHODS FOR MANUAL TRANSMISSIONS

### ABSTRACT OF THE DISCLOSURE

An engine control system transitions between activated and deactivated modes in a vehicle equipped with a manual transmission. The engine control system includes a clutch plate position sensor and  
5 a shifter shaft position sensor in communication with a controller. The controller determines if conditions to increase or reduce the number of active cylinders based on data collected from the position sensors, engine speed, and manifold absolute pressure. Prediction of the driver's next movements is the basis of the control. The sensors  
10 provide the history, averages, acceleration data, and velocity data, which lead to the driver's intent.